LISTING OF THE CLAIMS

This listing of claims will replace all prior versions and listings of the claims in this application:

1. (Currently amended) An information processing system, comprising;

~~a first processor, receiving input data and creating a pixel data stream provided over a first channel and a second channel, the first channel providing a signal to affect the output of a pixilated display, the second channel including location information and symbol information; and~~

~~a second processor coupled to the first processor, the second processor receiving the location information and the symbol information from the first processor, and the second processor receiving the input data, the second processor computes a derived version of the inputs based on the location information and the symbol information.~~

a symbol generator for receiving input data and creating a display list containing drawing instructions;

a graphics engine for receiving the display list containing drawing instructions and producing a pixel data stream;

a color detector for receiving the pixel data stream and passing red pixel data over a red path, green pixel data over a green path, and blue pixel data over a blue path;

a display for receiving the red pixel data and the green pixel data and displaying the red pixel data and green pixel data as symbols; and

a symbol monitor for receiving the blue pixel data and the input data, for verifying that the symbols are placed in a proper location on the display, and for

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verifying the symbols are correct by comparing the blue pixel data and the input data.

2. (Currently amended) The information processing system of claim 1, wherein the ~~first processor comprises a~~ symbol generator provides drawing instructions for correct X and Y positions for the symbols and a unique identifier for a type of symbol to be displayed.

3. (Currently amended) The information processing system of claim ~~1~~ 2, wherein the ~~first processor comprises a~~ symbol generator places the drawing instructions in a blue pixel buffer of the graphics engine.

4. (Currently amended) The information processing system of claim ~~1~~ 2, wherein the ~~pixilated display comprises a liquid-crystal display~~ the unique identifier for a type of symbol is an intensity level of the blue pixel data.

5. (Currently amended) The information processing system of claim ~~1~~ 4, wherein the ~~pixilated display comprises an information source for a heads-up display (HUD)~~ color detector detects and stores blue pixel X and Y positions and the intensity level of the blue pixel data for access by the symbol monitor.

6. (Currently amended) The information processing system of claim ~~1~~ 5, wherein the ~~input data comprises aircraft sensor data~~ symbol monitor identifies a symbol using the blue pixel intensity and determines where the symbol is being drawn on the display from detected symbol position data from the color detector.

7. (Currently amended) The information processing system of claim ~~1~~ 6, wherein the ~~input data comprises aircraft control surface data~~ symbol monitor uses the detected symbol position data from the color detector to determine what data input value positions the symbol in a unique location.

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8. (Currently amended) The information processing system of claim ~~1~~ 7, wherein the ~~derived version is computed using an inverse process~~ symbol monitor processes the detected symbol position data and compares the processed symbol position data with the input data.

9. (Currently amended) The information processing system of claim ~~1~~ 8, wherein ~~the second processor compares the input data and the derived version of the inputs~~ if a miscompare between the processed symbol position data and the input data occurs the symbol is blanked on the display.

Claims 10-15 are cancelled.

16. (Currently amended) A method of providing integrity checking for a ~~pixelated~~ pixilated display device, comprising the steps of:

receiving input data by a ~~first processor~~ symbol generator;

generating drawing instructions with the symbol generator for a graphics engine;

outputting pixel data from the graphics engine to a color detector;

receiving, by a display, ~~at least some of the~~ red and green pixel data ~~over first channel~~ from the color detector;

displaying a symbol using the red and green pixel data;

receiving ~~over a second channel~~, by a symbol monitor, ~~at least some of~~ the blue pixel data from the color detector; ~~and~~

receiving the input data by the symbol monitor; and

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comparing the blue pixel data with the input data.

17. (Currently amended) A method of claim 16, further comprising:

generating derived input information based on the blue pixel data ~~received over the second channel~~.

18. (Currently amended) The method of claim 17, further comprising:

comparing the derived input information with the input ~~information~~ data.

19. (Original) The method of claim 18, further comprising:

issuing an error warning if the comparison is not within a predefined threshold.

20. (Currently amended) The method of claim ~~18~~ 16, further comprising:

~~canceling the drawing instructions if the comparison is not within a predefined threshold~~

identifying, with the symbol monitor, a symbol using a blue pixel intensity; and

determining where the symbol is being drawn with data from the color detector.

21. (Currently amended) ~~An Information processing system~~ A pixilated display system with symbol position monitoring, comprising:

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a ~~first processing means,~~ a symbol generator receiving input data and creating a ~~pixel data stream provided over a first channel and a second, the first channel providing a signal to affect the output of a display, the second channel including location information~~ display list containing drawing instructions; ~~and~~

a graphics engine for receiving the display list containing drawing instructions and for producing a pixel data stream;

a color detector for receiving the pixel data stream and passing red pixel data and green pixel data and detecting and storing blue pixel data for providing symbol location information and symbol identification;

a display for receiving the red and green pixel data and displaying a symbol therefrom;

a ~~second processing means~~ symbol monitor coupled to the ~~first processing means~~ the color detector, the ~~second processing means~~ symbol monitor receiving the symbol location information and the symbol ~~information~~ identification from the ~~first processing means~~ the color detector and the ~~second processing means~~ symbol monitor receiving the input data, ~~the second processing computes a~~ computing derived ~~version of the inputs~~ input information based on the symbol location information and the symbol ~~information~~ identification, and comparing the input data to derived input information.

22. (Currently amended) The ~~information processing system~~ pixilated display of claim 21, wherein ~~the first processing means comprises a symbol generator~~ if a miscompare between the derived input information and the input data occurs the symbol is blanked on the display.

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23. (Currently amended) The ~~information processing system~~ pixilated display of claim 21, wherein ~~the first processing comprises a graphics engine~~ an intensity level of the blue pixel data provides symbol identification.

24. (Currently amended) The ~~information processing system~~ pixilated display of claim 21, wherein the ~~pixilated display comprises a liquid crystal display~~ symbol generator provides drawing instructions for correct X and Y position for the symbol and a unique identifier for the symbol.

25. (Currently amended) The ~~information processing system~~ pixilated display of claim ~~21~~ 24, wherein the ~~pixilated display comprises an information source for a heads-up display (HUD)~~ unique identifier for the symbol is an intensity level of the blue pixel data.

26. (Currently amended) The ~~information processing system~~ pixilated display of claim 21, wherein the input data comprises aircraft sensor data.

27. (Currently amended) The ~~information processing system~~ pixilated display of claim 21, wherein the input data comprises aircraft control surface data.

28. (Currently amended) The ~~information processing system~~ pixilated display of claim 21, wherein the derived version is computed using a matrix inversion process.

Claims 29-34 are cancelled

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